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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,856	12/08/2003	Byugjin Kim	2950-0277P	9299
2292	7590	06/06/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			BOCCIO, VINCENT F	
PO BOX 747			ART UNIT	
FALLS CHURCH, VA 22040-0747			PAPER NUMBER	

2616

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/728,856	KIM ET AL.	
	Examiner	Art Unit	
	Vincent F. Boccio	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/435,608.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/8/03</u>   | 6) <input type="checkbox"/> Other: ____                                     |

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**DETAILED ACTION**

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2616.

**Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6-8, 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujinami et al. (US 5,455,684).

Regarding claims 1-4, Fujinami discloses and meets the limitations associated with a method and corresponding apparatus for recording digital data streams to a medium, the method comprising the steps of:

- recording a received digital data stream (Fig. 11, DSM 10) of at least video data packets by grouping the data packet units (Fig. 13, unit and Fig. 14, the format of entry point of Fig. 13) into a program units (elements 6, 7) ; and
- creating and recording entry information pertaining to entry points of the digital data stream (Fig. 14, entry points "-3, -2, -1 & 1, 3, 5), wherein the program units constitute a program carried on the received digital stream, wherein the entry point is recorded on the medium 10.

Claims 6-8 and 10-13 are analyzed and discussed with respect to the claims above, wherein the claims above further recite a recording layer, wherein according to col. 1, is some sort of disk being a hard disk or optical, therefore, meeting the limitation of at least one layer.

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**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 5, 9, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujinami et al. (US 5,455,684).

Regarding claims 5, 9, 14, 18, Fujinami discloses that medium 10 is a digital storage medium, but, fails to disclose the medium being a DVD (Digital Versatile Disk) type medium.

The examiner takes official notice that the DVD is well known and obvious to those skilled in the art to utilize, having high capacity, therefore, it would have been obvious to one skilled in the art at the time of the invention to modify Fujinami by substituting a DVD for the DSM, being an obvious design choice to choose from any viable and commercially available, types of media, such as the DVD type, as is well known to those skilled in the art.

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5. Claims 15-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujinami et al. (US 5,455,684) taken with Hasegawa et al. (US 6,282,320).

Regarding claims 15-54, Fujinami meets the recited limitations as recited and analyzed above, but,

O fails to disclose the combination of OBJECTS units are organized into cells, the DVD medium, VOBUs containing video data, size and presentation time information and address.

The examiner reads these limitations in light of the specification, these terms used together, are interpreted as DVD data structures, wherein some of the recited elements are deemed to be conventionally known to those skilled in the art, the DVD medium, VOBs, Cells, VOBUs, MPEG 2, GOPs, and the time map, at least these recited attributes are deemed conventional or known to those skilled in the art.

The examiner cites, Hasegawa, which teaches known DVD data structures including VOBUs and Cells, wherein each cell has at least one VOB (Fig. 3), wherein an Object is conventionally being a movie, even clip, a cell being a section of video and wherein according to Fig. 3, each cell has multiple VOBs per cell, wherein each VOB has video frames, in accord to MPEG 2, therefore a GOP, or object, as taught by Hasegawa.

Hasegawa further teaches a data structure facilitating trick operation using a table of Fig. 11, a future variant of progression of the development of digital recording data structures, teaches wherein the medium of a DVD, wherein the MAP has presentation times, size information, playing time and location information for the map data for navigating for the purposes of reproduction in forward and reverse trick modes (cols. 7-8 and col. 6, also, see Fig. 2 c, t1, t2 ..... , Fig. 3, 5, 7, 8 c, elapse time, Fig. 19, step S603).

Most of the recited elements or limitations are deemed met by and are deemed more related to Hasegawa, which is deemed to read on the recites elements as claimed,

but, Hasegawa is deemed to show and meets the data structure, as claimed and describes the system as a video decoding apparatus and method,

but, fails to particularly disclose recording and encoding to create the data structure with map table.

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Fujinami provides the teaching supporting an obviousness of a recording method and apparatus as well as the reproduction thereafter of the recorded, in the area of generating a map for trick play operations, such as shown in Fig. 16, data is received A/V, encoded, table or entry point extraction from encoded data 31, storage of encoded 50, addition of TOC being entry point data for trick play operations, thereafter to a disk master cutting machine 60, stamping ROMS, being read only, as taught by Fujinami.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to create the data structures as claimed by receiving and encoding and recording to create the data structure of Hasegawa, as taught by Fujinami, as is deemed obvious to those skilled in the art to record to a known data structure, such as taught by Hasegawa.

**Contact Fax Information**

Any response to this action should be faxed to:


(703) 872-9306, (for communication intended for entry)

**Contact Information**

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record, Monday-Tuesday & Thursday-Friday, 8:00 AM to 5:00 PM Vincent F. Boccio (571) 272-7373.

Primary Examiner, Boccio, Vincent

5/28/05

  
VINCENT BOCCIO  
PRIMARY EXAMINER